



TIGAR Polyclonal Antibody

Catalog No	YP-Ab-07843
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;ELISA
Gene Name	TIGAR C12orf5
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	TIGAR Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	C12orf5;EC:3.1.3.46;Fructose-2,6-bisphosphatase TIGAR;TIGAR;TIGAR C12orf5;6-bisphosphatase TIGAR (EC 3.1.3.46) (TP53-induced glycolysis and apoptosis regulator)
Observed Band	29kD
Calculated Molecular Weight	29kD
Cell Pathway	Cytoplasm . Nucleus . Mitochondrion . Translocated to the mitochondria during hypoxia in a HIF1A-dependent manner (PubMed:23185017). Colocalizes with HK2 in the mitochondria during hypoxia (PubMed:23185017). Translocated to the nucleus during hypoxia and/or genome stress-induced DNA damage responses in cancer cells (PubMed:25928429). Translocation to the mitochondria is enhanced in ischemic cortex after reperfusion and/or during oxygen and glucose deprivation (OGD)/reoxygenation insult in primary neurons (By similarity). .
Tissue Specificity	Expressed in the brain (PubMed:22887998). Expressed in breast tumors (PubMed:21820150). Expressed in glioblastomas (PubMed:22887998).
Function	catalytic activity:Beta-D-fructose 2,6-bisphosphate + H(2)O = D-fructose 6-phosphate + phosphate.,caution:Not expected to have any kinase activity.,function:Probable fructose-biphosphatase. Lowers cellular levels of fructose 2,6-



bisphosphate. Protects cells against reactive oxygen species and against apoptosis induced by tp53., induction: Rapidly up-regulated by TP53., PTM: Phosphorylated upon DNA damage, probably by ATM or ATR., similarity: Belongs to the phosphoglycerate mutase family.,

Background

This gene is regulated as part of the p53 tumor suppressor pathway and encodes a protein with sequence similarity to the bisphosphate domain of the glycolytic enzyme that degrades fructose-2,6-bisphosphate. The protein functions by blocking glycolysis and directing the pathway into the pentose phosphate shunt. Expression of this protein also protects cells from DNA damaging reactive oxygen species and provides some protection from DNA damage-induced apoptosis. The 12p13.32 region that includes this gene is paralogous to the 11q13.3 region. [provided by RefSeq, Jul 2008],

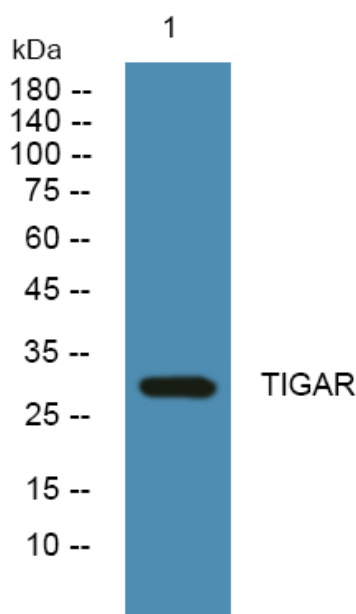
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western blot analysis of lysates from KB cells, primary antibody was diluted at 1:1000, 4° over night